

ABSTRACT

A system for detecting particles on the outer surface of a vehicle has a housing capable of being placed in a test position adjacent to, but not in contact with, a portion of the outer surface of the vehicle. An elongate sealing member is fastened to the housing along a perimeter surrounding the wall, and the elongate sealing member has a contact surface facing away from the wall to contact the outer surface of the vehicle to define a test volume when the wall is in the test position. A gas flow system has at least one gas inlet extending through the wall for providing a gas stream against the surface of the vehicle within the test volume. This gas stream, which preferably is air, dislodges particles from the surface of the vehicle covered by the housing. The gas stream exits the test volume through a gas outlet and particles in the stream are detected.